UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,663	07/20/2007	Dusan Miljkovic	100700.0033US	2456

24392 7590 03/14/2008

FISH & ASSOCIATES, PC
ROBERT D. FISH
2603 Main Street
Suite 1050
Irvine, CA 92614-6232

EXAMINER	
FLOOD, MICHELE C	

ART UNIT	PAPER NUMBER
1655	

MAIL DATE	DELIVERY MODE
03/14/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/599,663	MILJKOVIC, DUSAN	
	Examiner	Art Unit	
	Michele Flood	1655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 July 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *12/19/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The metes and bounds of Claims 1-6, 13,15, 16, 19 and 20 are uncertain because it is unclear as to the identification of the ingredients to which Applicant intends to direct the subject matter. Although the use of common names or traditional/ethnopharmacological names is permissible in patent applications, the standard Latin genus-species name of each ingredient should accompany non-technical nomenclature as a means for identifying the subject botanical and animal matter noted in this application. Applicant may overcome the rejection by placing the genus-species name of "coffee cherry" in parentheses after the appropriate Latin genus-species name. Please make sure to write the Latin name in the proper format, wherein the first word is capitalized, and the second word is lowercase and the entire name is italicized.

Claims 3 and 5 recite the abbreviation "ppb"; and, Claim 14 recites the abbreviation "UV". Abbreviations in the first instance of claims should be expanded upon with the abbreviation indicated in parentheses. The abbreviations can be used thereafter.

Claims 4, 5, 13, 15, 16, 19 and 20 recite the limitation "coffee cherry preparation". There is insufficient antecedent basis for this limitation in the claims.

Claims 8 and 9 recite the limitation "the preparation". There is insufficient antecedent basis for this limitation in the claims.

Claim 10 recites the limitation "the class of coffee acid" in line 1. There is a lack of clear antecedent basis for this limitation in the claim. Applicant may overcome the rejection by replacing "the class of coffee acid" with wherein the coffee acids.

Claim 11 recites the limitation "wherein the class of essential monosaccharides" in line 1. There is a lack of clear antecedent basis for this limitation in the claim. Applicant may overcome the rejection by replacing the recited limitation with wherein the essential monosaccharides.

Claim 18 recites the limitation "the formulation" in line 2. There is insufficient antecedent basis for this limitation in the claim.

The metes and bounds of Claims 9 and 10 are rendered uncertain because the percentage amounts of the ingredients are not set forth in terms of either "by weight" or "by volume" percentage amount of the total weight amount of the composition. The lack of clarity renders the claims indefinite since the resulting claims do not clearly set forth the metes and bounds of the patent protection desired.

All other cited claims depend directly or indirectly from rejected claims and are, therefore, also, rejected under U.S.C. 112, second paragraph for the reasons set forth above.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 2, 8-10 and 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Sceopul (N or V, Translation of foreign language patent provided herein. FR 153371 A).

Applicant claims a cosmetic composition comprising a composition prepared from whole coffee cherry. Applicant further claims the cosmetic composition of claim 1,

wherein the coffee cherry preparation is a preparation from a sub-ripe coffee cherry. Applicant further claims the cosmetic composition of claim 1 wherein the coffee cherry preparation is a preparation from a sub-ripe coffee cherry; and, wherein the preparation comprises at least two classes of compounds selected from the group consisting of coffee acids, coffee polyphenols, essential monosaccharides, coffee mucilage polysaccharides, and trigonelline, and wherein the at least two classes of compounds are present in the extract in an amount of at least 1 wt% total. Applicant further claims the composition of claim 8 wherein the at least two classes of compound are present in the preparation in an amount of at least 5 wt% total; wherein the class of coffee acid includes a compound selected from the group consisting of chlorogenic acid, ferulic acid, and caffeic acid; and, wherein the class of essential monosaccharides includes a compound selected from the group consisting of arabinose, fucose, mannose, xylose, and galactose. Applicant further claims the composition of claim wherein the composition is formulated as one of a shampoo, a lotion, a cream, a balm, and an ointment; further comprising an information associated with the composition that the composition comprises the coffee cherry preparation; and, further comprising information associated with the composition that the composition has an effect selected from the group consisting of an anti-oxidant effect, an anti-inflammatory effect, a UV-protective effect, an antimutagenic effect, a chemoprotective effect, a scar reducing effect, a skin-lightening effect, a moisturizing effect, a wrinkle reduction effect, and an antibacterial effect.

Sceopul teaches a cosmetic composition prepared from whole, sub-ripe coffee cherry, *i.e.*, the entire green fruit of coffee (*Coffea arabica*). See Column 1 of page 1, third paragraph to Column 2, line 7. Sceopul teaches, "Extracts of flowers and green fruit of the coffee plant obtained as follows: Flowers and fruit are washed with cold water and crushed in double cylinder extractors or electric grinders, giving creamy extracts varying in colour from yellow to grey-blue. Extract is purified and stabilizes with known preservatives and may be lyophilized to give fine stable powder." *See* abstract. As Sceopul teaches that whole, sub-ripe coffee cherry is used to prepare the extracts for cosmetic preparations, each of a bean of the coffee cherry, a pulp of the coffee cherry, a mucilage of a coffee cherry and a hull of the coffee cherry is inherent to the reference composition preparations. On page 1, second Column, line 36 to page 2, line 7, Sceopul further teaches that the cherry coffee extracts comprise sugars (9.5%), caffeic acid, tannic acids (8.4%), *etc*. The extracts are used in the making of shampoo, lotion, cream, balm, and sunscreen. *See* page 1, Column 1, second paragraph; and examples. Sceopul also teaches that the extract comprises caffeic acid (a coffee acid) and cafetannic acid (a coffee polyphenol). The Sceopul' patent provides information associated with the compositions that the compositions protect the skin and hair from extraneous influences, and exhibit astringent, vasomotive, tonifiying effect on cutaneous tissue and moisturizing activity on skin and moisturizing and protective effect of keratin of the hair.

The reference anticipates the claimed subject matter.

Claims 15-17 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Sceopul (N or V).

Applicant claims a method of marketing a cosmetic comprising a step of providing the cosmetic composition and a further step of providing an information that the composition comprises a composition prepared from whole coffee cherry. Applicant further claims the method of claim 15 wherein the coffee cherry preparation comprises an extract of the coffee cherry; and wherein the information is associated with the composition; and wherein the coffee cherry preparation is a preparation from a sub-ripe coffee cherry.

The teachings of Sceopul are set forth above. Sceopul teaches a step of providing a cosmetic composition comprising a preparation comprising an extract obtained from whole, sub-ripe coffee cherry. Sceopul further teaches a step of providing information associated with the referenced coffee cherry preparation. The cited reference teaches each of the claim-designated process steps; therefore, the claimed method is inherent to the teachings of Sceopul.

The reference anticipates the claimed subject matter.

Claims 1, 6, 7 and 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Saito et al. (P, Translation of foreign language patent provided herein.).

Applicant's claimed invention of Claims 1 and 12-14 was set forth above. Applicant further claims the cosmetic composition of claim 1 wherein the coffee cherry preparation comprises at least one of an aqueous extract and an alcoholic extract.

Applicant further claims the cosmetic composition of claim 6 wherein the extract is prepared from at least two of a bean of the coffee cherry, a pulp of the coffee cherry, a mucilage off the coffee cherry and a hull of the coffee cherry.

Saito teaches a cosmetic composition comprising an extract obtained from whole coffee cherry, *i.e.,* fruit of the coffee tree, by boiling the plant material in water and then extracting a resultant residue therefrom with an alcohol. The extract comprises caffeine and is used as a humectant in the making of lotion, cream, foundation, facial and body products, a well as hair grooming products and shampoos. Saito further teaches that the compositions exhibit organoleptic and moisturizing effects.

The reference anticipates the claimed subject matter.

Claims 1-11 and 13-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Miljkovic et al. (E) made evident by the teachings of Miljkovic et al. (A1, US 2002/0187239 A1).

Miljkovic teaches a composition comprising a composition prepared from whole coffee cherry, wherein the whole coffee cherry is a sub-ripe coffee cherry, and wherein the sub-ripe cherry is quick-dried such that a mycotoxin level of the coffee cherry is less than 20 parts per billion (ppb) for total aflatoxins, less than 10 ppb for total ochratoxins, and less than 5 parts per million (ppm) for total fumonisins. See [0048]. The coffee cherry extract comprises at least one of an aqueous extract and an alcoholic extract from at least two of a bean of the coffee cherry, a pulp of the coffee cherry, a mucilage of the coffee cherry and a hull of the coffee cherry and comprises coffee acids

(chlorogenic acid, ferulic acid and caffeic acid), high molecular weight polysaccharides in the claim-designated percentage ranges. Given that the reference teaches extraction of the plant material with at least one of an aqueous solvent and an alcohol or a mixture thereof, each of arabinose, fucose, mannose, xylose and galactose are deemed inherent to the composition taught by Miljkovic, absence evidence to the contrary. At [0008], Miljkovic teaches that the reference composition has an anti-oxidant effect. Given that there is nothing in the composition taught by Miljkovic to preclude its use as a cosmetic a cosmetic composition comprising a composition prepared from whole, sub-ripe coffee cherry is deemed inherent to the composition taught by Miljkovic. Moreover, as evidenced by the teachings of Miljkovic (A1) at [0046], nutraceutical compositions, such as the solid or liquid compositions taught by Miljkovic, prepared from coffee cherry products can be applied to the skin or hair to protect the exterior of the body from damaging effects of ultraviolet radiation, such as sunburn, wrinkles and loss of elasticity, in [0035-0046]. Finally, Miljkovic teaches a method of marketing the reference composition comprising providing printed information on package inserts and labeling on a package.

The reference anticipates the claimed subject matter.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sceopul (N or V) in view of The Free Dictionary by Farlex (U).

Claims 15-17 and 19 were rejected under 35 U.S.C. 102(b). However, the claims are also rejected herein for all of the reasons made readily apparent in the rejection set forth immediately below.

Applicant's claimed invention of Claims 15-17 and 19 was set forth above. Applicant further claims the method of claim 17 wherein the information is printed on at least one of a container containing the information and a package containing the container.

The teachings of Sceopul are set forth above. While the cited reference teaches a process for providing a cosmetic composition prepared from whole, sub-ripe coffee cherry and while the cited reference discloses information associated with formulations comprising an extract obtained from whole, sub-ripe coffee cherry, the teachings of Sceopul do not necessarily disclose a method of marketing the reference composition *per se*. For instance, according to The Free Dictionary by Farlex the concept of marketing a product generally entails the following aspects:

> "The activities of a company associated with buying and selling a product or service. It includes advertising, selling and delivering products to people. People who work in marketing departments of companies try to get the attention of target audiences by using slogans, packaging design, celebrity endorsements and general media exposure. The four 'Ps' of marketing are product, place, price and promotion. Notes: Many people believe that marketing is just about advertising or sales. However, marketing is everything a company does to acquire customers and maintain a relationship with them. Even the small tasks like writing thank-you letters, playing golf with a prospective client, returning calls promptly and meeting with a past client for coffee can be thought of as marketing. The ultimate goal of marketing is to match a company's products and services to the people who need and want them, thereby ensure profitability".

Nonetheless and given the teachings of Sceopul, the instantly claimed method would have been *prima facie* obvious because a method of marketing a cosmetic composition wherein the information about the cosmetic product is printed on at least one of a container containing the formulation and a package containing the container would have been well within the purview of one ordinary skill in the art at the time the invention was made. One of ordinary skill in the art would have been motivated and one would have had a reasonable expectation of success to augment the teachings of Sceopul to provide the instantly claimed method of marketing a cosmetic comprising a coffee cherry extract, such as the cosmetic formulations taught by Sceopul, because Sceopul teaches all of the requisite steps for providing a cosmetic comprising a coffee cherry extract and the teachings of Sceopul provide detailed information heralding the beneficial functional activities of the product upon application, as well as all of the ingredients and amounts of ingredients used in the making of the reference formulations. Therefore, the instantly claimed method would have been no more than a

matter of routine optimization to provide a result effect variable for the commercialization of the cosmetics taught by Sceopul, which were known in the art at the time the invention was made for its beneficial health promoting effects on the skin and the hair. Furthermore, given the teachings of Sceopul, common sense would have dictated and rendered the claimed method of marketing *prima facie* obvious to one of ordinary skill in the art because at the time the invention was made it was old and conventional in the art of marketing a cosmetic, such as the skin and hair compositions taught by Sceopul, that the placement of printing or printed material on a container detailing information about the cosmetic, as well as on the packaging the container, was beneficial in providing a vehicle for containing the product and a viable means for the mass distribution, delivery and storage of the product wherein the printed information on the container provides a means for the identification, promotion and sale of a product to a consumer base in want or need of a cosmetic product having beneficial functional effects.

Accordingly, the claimed invention was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, especially in the absence of evidence to the contrary.

Claims 1-5, 8-10 and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sceopul (N or V) in view of Soucy (A), Fabian (B), Olkku et al. (C) and Miljkovic et al. (E), and further in view of Batista et al. (W) and Frank (X).

Applicants claimed invention of Claims 1, 2, 8-10 and 12-19 was set forth above. Applicant further claims the cosmetic composition of claim 2 wherein the sub-ripe cherry is quick-dried such that a mycotoxin level of the coffee cherry is less than 20 parts per billion (ppb) for total aflatoxins, less than 10 ppb for total ochratoxins, and less than 5 parts per million (ppm) for total fumonisins. Applicant further clams the cosmetic composition of claim 1 wherein the coffee cherry preparation is a preparation from a quick-dried coffee cherry. Applicant further claims the cosmetic composition of claim 4 wherein the sub-ripe cherry is quick-dried such that a mycotoxin level of the coffee cherry is less than 20 parts per billion (ppb) for total aflatoxins, less than 10 ppb for total ochratoxins, and less than 5 parts per million (ppm) for total fumonisins. Applicant further clams the method of claim 15 wherein the coffee cherry preparation is a preparation from a quick-dried coffee cherry.

The teachings of Sceopul are set forth above. Sceopul teaches the instantly claimed cosmetic and method of marketing thereof except for wherein the cosmetic composition is prepared from quick-dried coffee cherry and wherein the sub-ripe coffee cherry is quick-dried such a mycotoxin level of the cherry is less than 20 parts per billion (ppb) for total aflatoxins, less than 10 ppb for total ochratoxins, and less than 5 parts per million (ppm) for total fumonisins. However, it would have been obvious to one of ordinary skill in the art to subject the coffee cherry used in the making of the cosmetic composition taught by Sceopul with a quick-dried coffee cherry to provide the instantly claimed inventions because at the time the invention was made studies showed that *Aspergillus, Penicillium* and *Fusarium* are natural coffee contaminants having the

potential to produce aflatoxins, ochratoxins, and fumonisins which are detrimental to the quality and safety of the final product (*see* Batista and Frank); and, Soucy, Fabian, Olkku and Miljkovic teach quick-dry methods for reducing the number of the toxigenic fungal genera and mycotoxin contaminants in coffee cherry or coffee bean products, or similar crops. Firstly, Soucy teaches an apparatus for drying whole coffee beans, coca beans (whole coffee cherry), and various grains. Soucy further teaches that the drying apparatus provides a simple solar powered dryer system for the removal of moisture from bulk materials such as whole coffee cherries which significantly reduces the moisture content. Secondly, Fabian teaches a process for removing mycotoxins that may be present in green coffee, such as aflatoxins and ochratoxins, by solvent extraction and exposure to high temperature and water vapor such that the coffee beans become porous and permeable for the rapid removal of mycotoxins. Thirdly, Olkku teaches a heat treatment method for decreasing the mold content and the mycotoxin level in seed products comprising quick-drying the kernels for a short period of time at a temperature range. Olkku also teaches that the method is useful in killing field fungi, such as Aspergillus, Penicillin and Fusarium, and reducing the content of mycotoxins, including aflatoxins, ochratoxins and fumonisins by reducing the moisture content of the crops. Finally, Miljkovic teaches a composition comprising a composition prepared from whole coffee cherry, wherein the whole coffee cherry is a sub-ripe coffee cherry, and wherein the sub-ripe cherry is quick-dried such that a mycotoxin level of the coffee cherry is less than 20 parts per billion (ppb) for total aflatoxins, less than 10 ppb for total ochratoxins, and less than 5 parts per million (ppm) for total fumonisins. See

[0048]. The coffee cherry extract comprises at least one an aqueous extract and an alcoholic extract from at least two of a bean of the coffee cherry, a pulp of the coffee cherry, a mucilage of the coffee cherry and a hull of the coffee cherry and comprises coffee acids (chlorogenic acid, ferulic acid and caffeic acid), high molecular weight polysaccharides in the claim-designated percentage ranges. At the time the invention was made, one of ordinary skill in the art would have been motivated and one would have had a reasonable expectation of success to quick-dry the coffee cherry used in the making of the composition taught by Sceopul to provide the instantly claimed inventions because Soucy teaches that the drying apparatus provides an expensive, simple solar powered dryer system for the removal of moisture from bulk coffee materials without overdrying and suggests that the drying system is better than conventional passive solar drying time which is too long and subject to exposure to detrimental weather conditions that do not safeguard against excess moisture and possible mold contamination or formation in the coffee crops (see Columns 1 and 2 in their entirety); Fabian teaches that the referenced method effectively removes mycotoxins from green coffee under conditions that do not reduce caffeine quality; Olkku teaches that quick drying crops subject to field fungi contamination is useful in decreasing mold content and levels of mycotoxins present in plant seeds without reducing the biological activity of the heat treated plant material; and, Miljkovic teaches that large amounts of polyphenolic compounds can be extracted from sub-ripe, whole coffee cherry which is quick-dried and that quick-drying a sub-ripe whole coffee cherry reduces mycotoxins indigenous to coffee cherry and coffee cherry extracts obtained therefrom.

Accordingly, the claimed invention was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, especially in the absence of evidence to the contrary.

Claims 1, 2 and 6-14 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sceopul (N or V) in view of Drunen et al. (D), Miljkovic et al. (A1, US 2002/0187239 A1), Fischer et al. (U1), Clifford et al. (V1) and Coleman et al. (W1), and further in view of Pineau et al. (F), Huang et al. (X1) and Stuckler et al. (O).

Applicant's claimed invention of Claims 1, 2, 6-8, and 12-14 was set forth above. Applicant further claims the cosmetic composition of claim 1 wherein the coffee cherry preparation comprises at least one of an aqueous extract and an alcoholic extract. Applicant further claims the cosmetic composition of claim 6 wherein the extract is prepared from at least two of a bean of the coffee cherry, a pulp of the coffee cherry, a mucilage off the coffee cherry and a hull of the coffee cherry. Applicant further claims the composition of claim 8 wherein the class of essential monosaccharides includes a compound selected from the group consisting of arabinose, fucose, mannose, xylose and galactose.

The teachings of Sceopul are set forth above.

The referenced cosmetic composition appears to be identical to the presently claimed cosmetic composition and is considered to anticipate the claimed invention for the following reasons: It is unclear from the teachings of Sceopul the solvents used in

the preparation of the extract obtained from whole, sub-ripe coffee cherry. However, Sceopul does teach that chemical analysis of the reference coffee extract reveals the presence of sugars, caffeine, and alcoholic extracts including cellulose, dextrine, as well as the presence of caffeic acids (coffee acids) and cafetannic acids (coffee polyphenols). Thus, it would appear that the composition taught by Sceopul comprises a coffee cherry extract prepared by at least one of an aqueous extraction and an alcoholic extraction, especially since Sceopul teaches that the extract is prepared by conventional "substances known in biological chemistry for this type of operation" (See page 3, paragraphs 2 and 3 of the translated document); and since Drunen teaches that extraction of both polyphenolic compounds and sugars from coffee cherries require the use of both water and alcohol. *See* Column 3, lines 40-56. Moreover, Fischer teaches an alcohol extract of green beans of *Coffea Arabica* comprise fucose, rhamnose, arabinose, galactose, glucose, xylose, and mannose (55.8%) in Table 1; Clifford teaches extraction of chlorogenic acids, caffeine and trigonelline from dried green coffee beans (*Coffea arabica*) with water; and, Coleman teaches extraction of crude coffee cherry mucilage with ethanol to obtain a galacturonic acid fraction comprising arabinose, galactose, xylose and rhamnose. Although Sceopul does not expressly teach that the use of at least one of an aqueous solvent and an alcohol solvent in the making of the coffee cherry extract, given that Sceopul does teach a cosmetic composition prepared from the entire fruit (which inherently comprises an extract prepared from at least two of a bean of the coffee cherry, a pulp of the coffee cherry, a mucilage of the coffee cherry and a hull of the coffee cherry) of sub-ripe, whole coffee

cherry comprising coffee acids, coffee polyphenols and coffee sugars (monosaccharides and/or polysaccharides); and given that the prior art teaches that only water will extract polyphenolic compounds from coffee cherry products and that only alcohol will extract polysaccharides from coffee cherry products, and that a mixture of water and alcohol as a solvent will extract both polyphenols and polysaccharides from coffee cherry products, a cosmetic composition comprising at least one of an aqueous extract and an alcoholic extract is deemed inherent to the composition taught by Sceopul. Consequently, the claimed composition appears to be anticipated by the cited reference, absent evidence to the contrary.

Even if the claimed composition is not identical to the reference composition with regard to some unidentified characteristics, the differences between that which is disclosed and that which is claimed are considered to be so slight that the reference composition is likely to inherently possess the same characteristics of the instantly claimed composition particularly in view of the similar plant material ingredients, cosmetic form and functional effect which they have been shown to share. In the alternative, even if the claimed composition differs from the reference composition by comprising a whole, sub-ripe coffee cherry comprising a coffee cherry preparation comprising at least one of an aqueous extract and an alcoholic extract, and further comprising at least classes of compounds selected from the Markush groups recited in each of Claims 8-11, the instantly claimed invention still would have been obvious to one of ordinary skill in the art within the meaning of 35 U.S.C. 103. For instance, it would have been obvious to one ordinary skill in the art to optimize the composition

taught by Sceopul by employing at least one of an aqueous solvent and an alcohol solvent to provide the instantly claimed composition because at the time the invention was made Drunen taught the usefulness of water and alcohol as solvents in the extraction of acids, polyphenols and polysaccharides from quick dried coffee cherry products (see Column 3, lines 1-8). *See* Column 3, lines 40-56. In Column 4, under "*EXAMPLE 1*", Drunen teaches extracting a dried coffee cherry pulp in the making of a composition comprising an aqueous extract comprising chlorogenic acid, ferulic acid, caffeic acid, proanthocyanins, caffeine, etc. Like Drunen, Miljkovic teaches a method of making a composition comprising health promoting antioxidants by extracting dried coffee cherry product (absent bean, such as coffee cherry mucilage or coffee cherry pulp or a mixture of dry pulp, mucilage and hull) with water to obtain an extract comprising polyphenols, including caffeic acid, ferulic acid, and chlorogenic acid. *See* Examples in Column 6. Miljkovic teaches that the compositions can be used in the making of cosmetic compositions with reduced mycotoxin levels that can be applied to the skin or hair to protect the exterior of the body from damaging effects of ultraviolet radiation, such as sunburn, wrinkles and loss of elasticity, in [0035-0046]; and, that hot water, or ethanol/water mixtures are used as solvents to prepare coffee cherry extracts comprising carbohydrates, polyphenols, caffeic acid, ferulic acid, chlorogenic acid. While each of Drunen and Miljkovic teaches that water and alcohol can extract health enhancing coffee acids, polyphenols and polysaccharides from coffee cherry by-products comprising coffee cherry pulp, coffee cherry mucilage and coffee cherry hull, neither Drunen nor Miljkovic teach the polysaccharides contained therein the extracts or

extraction of a coffee cherry bean with at least water and alcohol or trigonelline as a component of a coffee cherry extract. However, as set forth above, Fischer teaches an alcohol extract of green beans of *Coffea arabica* comprise fucose, rhamnose, arabinose, galactose, glucose, xylose, and mannose (55.8%) in Table 1; Clifford teaches extraction of chlorogenic acids, caffeine and trigonelline from dried green coffee beans (*Coffea arabica*) with water; and, Coleman teaches extraction of crude coffee cherry mucilage with ethanol to obtain a galacturonic acid fraction comprising arabinose, galactose, xylose and rhamnose. Therefore, it would have been obvious to one ordinary skill in the art to optimize the composition taught by Sceopul by employing at least one of an aqueous solvent and an alcohol solvent to provide the instantly claimed composition because at the time the invention was made it was known in the art that coffee cherry bean and coffee cherry mucilage could be extracted with at least one of an aqueous solvent and an alcohol solvent to prepare compositions comprising beneficial compounds such as chlorogenic acids, trigonelline, essential monosaccharides, and coffee mucilage polysaccharides. One of ordinary skill in the art would have been motivated and one would have had a reasonable expectation of success to optimize the composition taught by Sceopul by employing at least one of an aqueous solvent and an alcohol solvent to provide the instantly claimed composition because at the time the invention was made it was known that the claim-designated solvents were useful in the extraction of beneficial compounds having health promoting effects on the skin and hair, as evidenced by the teachings of Pineau and Huang. For instance, Pineau teaches that the application to skin cosmetic compositions comprising

at least one polyholoside comprising at least two monosaccharides, such as arabinose, xylose, fucose, mannose, galactose for promoting desquamation of the skin of a mammalian organism in need of such treatment and/or to stimulate epidermal renewal and/or inhibit intrinsic and/or extrinsic cutaneous aging; Huang teaches that topical skin compositions comprising chlorogenic acid, caffeic acid and ferulic acid exert inhibitory effect on tumor promotion in mouse skin by 12-O-tetradecanoyolphorbol-13-acetate; and, Stuckler teaches that trigonelline is useful in the making of cosmetic compositions for topical administration, e.g., as lotions or shampoos, for nail, skin and hair care, for reducing hair loss and for stimulating hair growth.

Thus, the instantly claimed extract would have been *prima facie* obvious and a matter of optimization to provide a result effect variable to one of ordinary skill in the art practicing the invention at the time the invention was given the references before him or her taught that the claim-designated plant materials and claim-designated solvents were useful in the extraction of classes of compounds from a coffee cherry known in the art to have health promoting effects and could used in the making of cosmetic compositions having antioxidant effect, anti-inflammatory effect, ultraviolet protective effect, chemoprotective effect, scar reducing effect, moisturizing effect, and wrinkle reduction effect.

Accordingly, the claimed invention as a whole was at least *prima facie* obvious, if not anticipated by the reference, especially in the absence of sufficient, clear, and convincing evidence to the contrary.

Please note, "The patentability of a product does not depend upon its method of production. If the product in [a] product-by-process claim is the same as or obvious from a product of the prior art, [then] the claim is unpatentable even though the prior [art] product was made by a different process." In re Thorpe, 227 USPQ 964, 966 (Fed. Cir. 1985) (citations omitted). Once the examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing unobvious difference between the claimed product and the prior art product. In re Marosi, 218 USPQ 289, 292 (Fed. Cir. 1983).

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miljkovic et al. (E) in view of Miljkovic et al. (A1).

Applicant's claimed invention was set forth above.

The teachings of Miljkovic (E) were set forth above. Miljkovic (E) teaches the instantly claimed invention except for wherein the composition is formulated as one of a shampoo, a lotion, a cream, a balm and an ointment. However, it would have been obvious to one of ordinary skill in the art to formulate the composition taught by Miljkovic as any of the claim-designated forms because at the time the invention was made Miljkovic (A1) taught that nutraceutical compositions such as those prepared by Miljkovic could be used in the making of a solution, cream or oil for application to the skin or hair to provide beneficial health promoting effects. At the time the invention was made, one of ordinary skill in the art would have been motivated and one would have

had a reasonable expectation of success to formulate the compositions taught by Miljkovic as a one of a shampoo, lotion, a cream, a balm and an ointment to provide the instantly claimed invention because Miljkovic (A1) taught that quick-dried coffee cherry extracts can be formulated into various cosmetic formulations such as oils and creams well known in the cosmetic industry and readily available from a variety of sources.

Accordingly, the claimed invention was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, especially in the absence of evidence to the contrary.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michele Flood whose telephone number is 571-272-0964. The examiner can normally be reached on 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terry McKelvey can be reached on 571-272-0775. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michele Flood
Primary Examiner
Art Unit 1655

MCF
February 26, 2008
/Michele Flood/
Primary Examiner, Art Unit 1655